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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,515

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Lee E. Cannon

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EXAMINER

HOEL, MATTHEW D

ART UNIT

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3714

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/627,515	Applicant(s) CANNON, LEE E.	
	Examiner Matthew D. Hoel	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 49 to 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinek, et al. (U.S. pre-grant publication 2003/0130032 A1) in view of Arnold (EPO publication 0 661 675 A2, application 94117809.7).

4. As to Claims 49 and 54: Martinek in '032 discloses all of the limitations of Claims 49 and 54, but lacks specificity as to comparing first and second gaming data from first and second respective gaming organizations in the same embodiment. '032 in Paras. 83 and 90 teaches a first gaming organization being the Nevada Gaming Regulation Commission, a regulatory agency. Para. 83 of '032 teaches a second gaming organization being the game manufacturer or designer. Fig. 4 of '032 teaches decrypting a message digest created from a loadable data set via one public key 238 and its corresponding decryption program 230 and decrypting a signature via another public key 234 and its corresponding decryption program 232 (Fig. 4; Para. 81). '032 in Fig. 3 teaches taking a loadable data set 212 and creating a message digest 214 and

signature 220 via a public/private key pair 218 (Paras. 79 & 80). '032 teaches a gaming apparatus (Abst.). There is a display unit (108, Fig. 1); a value input device (104 & 105, Fig. 1); a controller operatively coupled to said display unit and said value input device, said controller comprising a processor and a memory operatively coupled to said processor (Fig. 5) and having first encrypted gaming data stored in the memory (message digest 228, Fig. 4, to be decrypted with decryption program 230) and second encrypted gaming data stored in the memory (signature 240, Fig. 4, to be decrypted with decryption program 231) , said first encrypted gaming data having been generated by encrypting gaming data utilizing an encryption key of a first gaming organization and said second encrypted gaming data having been generated by encrypting gaming data utilizing an encryption key of a second gaming organization, said controller being programmed to retrieve said first encrypted gaming data from the memory (228, Fig. 4, Para. 81); said controller being programmed to decrypt said first encrypted gaming data (decryption program 230, Fig. 4, decrypting message digest 228) utilizing an encryption key of said first gaming organization to form first decrypted gaming data; said controller being programmed to retrieve said second encrypted gaming data from the memory (240, Fig. 4, Para. 81); said controller being programmed to decrypt said second encrypted gaming data (decryption program 232, Fig. 4, decrypting signature 240) utilizing an encryption key of said second gaming organization to form second decrypted gaming data; and said controller being programmed to determine whether said first decrypted gaming

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data is identical to said second decrypted gaming data (comparing step 236, Fig. 4, Para. 81). What '032 lacks is first encrypting gaming data with a first key from a first gaming organization and a second key from a second organization and decrypting the gaming data with the first and second keys from the first and second gaming organizations. '032 does teach first and second gaming organizations, and decrypting first gaming data with one public key and second gaming data with a second public key and then comparing the two gaming data as outlined above. The examiner believes that first encrypting gaming data with a first key from a first gaming organization and a second key from a second organization and decrypting the gaming data with the first and second keys from the first and second gaming organizations is obvious in light of Arnold ('675). '675 in Figs. 3, 4, and 5 shows a data set being encrypted with separate keys from separate entities (a user and a supervisor, analogous to a game developer and a Gaming Commission, respectively, of '032). Fig. 3, 5:44-6:3 of '675 describes a data set X_{sup} being encrypted with a supervisor's session key $KS1$. Fig. 4, 6:4-19 of '675 describes the same data set with a user's session key $KS2$. Fig. 5, 6:20-7:20 of '675 describes the computation of the decryption value using the supervisor's session key $KS1$ to recover X_{sup} and the computation of the decryption value using the user's session key $KS2$ to recover X_{sup} . If the two recovered values of X_{sup} are the same, the desired activity is allowed to continue (steps 65, 69, 71, Fig. 1). The modification the examiner is proposing to make is to apply this parallel encryption and decryption using two separate keys from two organizations to Figs. 3 and 4 of '032. The game developer's public/private key pair 218 (Fig. 3) and corresponding encryption program

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216 (Fig. 3) and decryption program 230 (Fig. 3) would be used to provide a message digest and signature to the casino operating the gaming machine. The public key of the game developer would be known to the casino and the private key would be only known to the developer. The game developer would also supply the game data loadable set (212 of Fig. 3 and 224 of Fig. 4) to the Gaming Commission, which would sign the loadable data set with its own public/private key pair 218 (Fig. 3) and corresponding encryption program 216 (Fig. 3) and decryption program 232 (Fig. 4), as suggested by '032 (Para. 83). The Gaming Commission's public key would be known to the casino and the private key would be known only to the gaming commission. The casino would proceed as described in Fig. 4 of '032 and decrypt the message digest 228 received from the game developer using the game developer's public key 238 and corresponding decryption program 230 and decrypt the signature using the Gaming Commission's public key 234 and corresponding decryption program 232. If the two values are equal, as in step 236 (Fig. 4 of '032, corresponding to step 65 of '675's Fig. 5), the gaming activity would be allowed to proceed. Even though the message digest 236 would be received by the casino from the game developer and the signature 240 would be received from the Gaming Commission, they would be the same when decrypted (if authentic), because they were both generated from the same loadable data set (224 of Fig. 4 corresponding to 212 of Fig. 3, '032) developed by the gaming manufacturer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the parallel encryption and decryption of '675 (Figs. 3 to 5) as described above to the parallel decryption of '032 (Fig. 4). Both references are

analogous in that the supervisor of '675 corresponds to the Gaming Commission of '032 and the user of '675 corresponds to the game developer of '032. Both references teach parallel decryption with separate keys and comparing two values to see if they are equivalent as described above. The result is simply a superposition of known encryption techniques. The modification would have the effect and advantage of keeping the Gaming Commission always in the loop, so that casinos would not be able to decrypt and use software updates from game developers until they have been evaluated and digitally signed by the Gaming Commission ('032, Para. 57). '032 even suggests the decryption being done in the presence of two persons to ensure security (Para. 138). The use of the data set Xsup as taught by '675 would have an advantage in that the game data set could only be decrypted in the presence of a Gaming Commissioner or delegate representative thereof (the supervisor of '675).

5. As to Claims 50 and 55: The display unit of '032 generates a game display representing poker, blackjack, slots, keno, or bingo (Paras. 7 & 21).

6. As to Claims 51 and 56: '032 teaches said first gaming data comprising substantially all gaming data necessary to facilitate play of a casino game (self-contained, functional units defining operation of game, Para. 78; see also Fig. 6, Para. 97).

7. As to Claims 52 and 57: '032 teaches said display unit comprising a video display unit that is capable of generating video images (Para. 7, 67).

Claim Rejections - 35 USC § 101

8. Claims 49 to 57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is clear that the steps executed by the gaming apparatus of Claim 49 are carried out by the gaming apparatus, but this is not clear in the method Claim 54. Claim 49 specifically cites the controller being programmed to carry out the steps, so this aspect is good. Also in both independent claims, there is no concrete, tangible, and useful result of the favorable comparison of the two decrypted values in either independent claim, such as allowing a player to proceed to play a game. Such a game could include accepting input from a player via input devices on the gaming apparatus, manipulating the input data in physical memory by a processor, displaying the result of the manipulation (being the game play) to the player via an output device of the gaming apparatus, or paying the player in the event of any winning conditions. Claim 54 as written is merely an abstract manipulation of information, with no concrete, tangible, or useful result.

Response to Arguments

9. Applicant's arguments with respect to claims 1 to 5, 23, 24, and 26 to 31 have been considered but are moot in view of the new ground(s) of rejection. The examiner respectfully disagree with the applicant as to the claims' condition for allowance.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on (571) 272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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